

THE DEPARTMENT OF ELECTRICAL & COMPUTER ENGINEERING SPEAKER SERIES

PRESENTS

Title: Chest X-ray Imaging Diagnosis: Classification, Localization, and Interpretation



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Meeting ID: 976 269 9678

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LECTURE ABSTRACT

Abstract: Chest X-ray is one of the most common non-invasive examinations for detecting cardiothoracic and pulmonary abnormalities. Due to the demand for accelerating chest X-ray analysis and interpretation along with the overall shortage of radiologists, there has been a surging interest in building automated systems of chest X-ray abnormality classification and localization. This talk will highlight the latest research on how to integrate the prior-knowledge of radiologists (e.g., radiomics) to improve classification and localization, and utilize the explainable AI methods to significantly improve localization.

SPEAKER BIOSKETCH

Dr. Ying Ding is Bill & Lewis Suit Professor at School of Information, and adjunct Professor at Department of Population Health at Dell Medical School, University of Texas at Austin. She leads the AI in Health Lab at School of Information and Dell Medical School with the focus on medical imaging, medical notes summary, health risk prediction, and explainable AI. Before that, she was a professor and director of graduate studies for data science program at School of Informatics, Computing, and Engineering at Indiana University. She has led the effort to develop the online data science graduate program for Indiana University. She has been involved in various NIH, NSF and European-Union funded projects. She has published 240+ papers in journals, conferences, and workshops, and served as the program committee member for 200+ international conferences. She is the co-editor of book series called Semantic Web Synthesis by Morgan & Claypool publisher, the co-editor-in-chief for Data Intelligence published by MIT Press, and serves as the editorial board member for several top journals in Information Science and Semantic Web. She is the co-founder of Data2Discovery company advancing cutting edge AI technologies in drug discovery and healthcare. Her

current research interests include medical imaging, knowledge graph, graph deep learning, AI in health, data-driven science of science, and team collaboration.

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